AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): ~~Constellation~~ A constellation information transmitting arrangement ~~(BiGi_TA)~~ for ~~use in~~ a multi-carrier transmitter ~~(TX)~~ or a multi-carrier receiver ~~(RX)~~ of a multi-carrier system, said arrangement ~~(BiGi_TA)~~ comprising:

means ~~(BiGi_PROD)~~ for producing carrier constellation information indicative for constellations where respective carriers will be modulated with by said multi-carrier transmitter ~~(TX),~~ ; and

means ~~(BiGi_TX)~~ for transmitting said carrier constellation information,

wherein~~CHARACTERISED IN THAT~~ said means ~~(BiGi_PROD)~~ for producing carrier constellation information is adapted to produce for at least one respective carrier subset ~~(SUBSET1, SUBSET2, ..., SUBSET8)~~ a set of parameter values ~~(B1, G1; B2, G2; ...; B8, G8)~~ from which constellations of all carriers ~~(f_0 ... f_{511}; f_{512} ... f_{1023}; ...; f_{3584} ... f_{4095})~~ in said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~ can be retrieved through interpolation.

2. (currently amended): ~~Arrangement (BiGi_TA)~~The constellation information transmitting arrangement according to claim 1,

wherein~~CHARACTERISED IN THAT~~ said set of parameter values ~~(B1, G1; B2, G2; ...; B8, G8)~~ consists of a first number of bits ~~(B1; B2; ...; B8)~~ and a first gain value ~~(G1; G2; ...; G8)~~.

3. (currently amended): ~~Arrangement (BiGi_TA)~~The constellation information transmitting arrangement according to claim 1,

wherein~~CHARACTERISED IN THAT~~ said set of parameter values consists of a first number of bits, a first gain value and a second gain value.

4. (currently amended): ~~Arrangement (BiGi_TA)~~The constellation information transmitting arrangement according to claim 3,

wherein~~CHARACTERISED IN THAT~~ said constellations of all carriers in said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~ can be retrieved through linear interpolation.

5. (currently amended): ~~Arrangement (BiGi_TA)~~The constellation information transmitting arrangement according to claim 1,

~~CHARACTERISED IN THAT said arrangement (BiGi_TA)~~ further ~~contains~~ comprising:

means to produce a description of said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8),~~; and

means to transmit said description of said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~.

6. (currently amended): ~~Arrangement (BiGi_TA)~~The constellation information transmitting arrangement according to claim 1,

wherein~~CHARACTERISED IN THAT~~ N carriers are divided into M subsets of N/M carriers with successive carrier indices, N being a first integer number representing a total amount of carriers used in said multi-carrier system, and M representing a second integer number whereby N is an integer multiple of M.

7. (currently amended): ~~Constellation~~ A constellation information receiving arrangement ~~(BiGi_RA)~~ for ~~use in~~ a multi-carrier transmitter ~~(TX)~~ or a multi-carrier receiver ~~(RX)~~ of a multi-carrier system, said arrangement ~~(BiGi_RA)~~ comprising:

means ~~(BiGi_RX)~~ for receiving carrier constellation information indicative for constellations where respective carriers will be modulated with by said multi-carrier transmitter ~~(TX),~~; and

means ~~(BiGi_DET)~~ for determining said constellations from said carrier constellation information,

wherein~~CHARACTERISED IN THAT~~ said means ~~(BiGi_DET)~~ for determining said constellations ~~comprise~~ comprises

interpolating means adapted to retrieve constellations of all carriers ~~(f_0 ... f_{511}; f_{512} ... f_{1023}; ..., f_{3584} ... f_{4095})~~ in at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~ from a respective set of parameter values ~~(B1, G1; B2, G2; ...; B8, G8)~~ that forms part of said carrier constellation information.

8. (currently amended): ~~Arrangement (BiGi_RA)~~The constellation information receiving arrangement according to claim 7,

wherein~~CHARACTERISED IN THAT~~ said set of parameter values ~~(B1, G1; B2, G2; ...; B8, G8)~~ consists of a first number of bits ~~(B1; B2; ...; B8)~~ and a first gain value ~~(G1; G2; ...; G8)~~ and in that said interpolating means is adapted to determine for each carrier ~~(f_0 ... f_{511}, f_{512} ... f_{1023}, ..., f_{3584} ... f_{4095})~~ in said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~ a number of bits equal to said first number ~~(B1; B2; ...; B8)~~ and a gain value equal to said first gain value ~~(G1; G2; ...; G8)~~.

9. (currently amended): ~~Arrangement (BiGi_RA)~~The constellation information receiving arrangement according to claim 7,

wherein~~CHARACTERISED IN THAT~~ said set of parameter values consists of a first number of bits, a first gain value and a second gain value, and ~~in that~~

wherein said interpolating means is adapted to determine for each carrier in said at least one respective carrier subset a number of bits equal to said first number of bits and a gain value through linear interpolation between said first gain value and said second gain value.

10. (currently amended): ~~Arrangement (BiGi_RA)~~The constellation information receiving according to claim 7,

~~CHARACTERISED IN THAT said arrangement (BiGi_RA)~~ further ~~contains~~ comprising:

means to receive a description of said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8);~~ and

means to interpret said description of said at least one respective carrier subset ~~(SUBSET1; SUBSET2; ...; SUBSET8)~~.

11. (new): The constellation information transmitting arrangement according to claim 2, wherein said interpolation retrieves the first number of bits and the gain value.

12. (new): The constellation information transmitting arrangement according to claim 7, wherein said interpolation retrieves a number of bits and a gain value of the parameter of values.